

## ON SOME CHALCIDIDÆ.

BY G. H. FRENCH, CARBONDALE, ILL.

In the January number of the CANADIAN ENTOMOLOGIST I described two new species of this interesting family under the names of *Isosoma Allynii* and *I. Elymi*. Professor C. V. Riley, to whom a pair of the first were sent, writes me that they belong to the genus *Eupelmus* instead of *Isosoma*. From a re-examination of my specimens I think he is correct, and the species will be known as *Eupelmus Allynii*, instead of as first described. They have 11 joints to the antennæ, and the prothorax short.

Since writing the descriptions above referred to I have had a number of wingless insects hatch from my wheat straws, and it is now evident that the description of chrysalids, and perhaps larvæ, as given under '*Isosoma Allynii*', can not apply to that species, but to these wingless specimens. In a recent letter Professor Riley states that he has bred wingless specimens of an *Isosoma* from wheat received from Kentucky, and it is probable these are the same. I am inclined to think they belong to *Isosoma Elymi* that I obtained from the stalk of *Elymus Canadensis*, though it will be difficult to say positively without more specimens of *Elymi* or winged specimens of the other. The wingless ones are from .10 to .11 of an inch long, inclusive of ovipositor, while the winged *Elymi* I have is .07 of an inch. Premature development might account for the difference. They agree in the following points. Both have 9-jointed antennæ with whorls of hairs at the base of the joints, the antennæ black except the base, which is fulvous, the darkest in the winged specimen. The legs have the femurs and tibiæ fuscous, the joints fulvous, the feet, all but the terminal joint, brownish yellow. Abdomen jet black, the ovipositor and hairs brownish, the hairs arranged chiefly at the sutures of the joints. Head and thorax dull or brownish black, coarsely punctured, the eyes piceous, a fulvous spot on dorsum and sides of the prothorax and similar marks under the thorax. Where there are light markings those on the wingless specimens are a little paler than the corresponding ones on the winged specimen from which my description of *I. Elymi* was taken.

On the other hand, I have now (Feb. 9) larvæ inside stalks of *Elymus Canadensis*. Will they produce *I. Elymi* or something else? Rearing them to the imago will alone tell, and that may help to settle the other

question. I may say in conclusion that I have bred a specimen of *Eupelmus Allynii* from a gall that was probably made by *Isosoma Hordei*, hence there is a probability that the specimens I bred from the wheat stalks were parasitic on the larva of our wingless *Isosoma*.

## NOTES ON CERTAIN BUTTERFLIES. THEIR HABITS, ETC.

### No. 2.

BY W. H. EDWARDS, COALBURGH, W. VA.

#### 8. On Young Caterpillars Eating their Egg Shells.

Mr. Scudder, *Butterflies*, p. 101, says, after describing the way in which the caterpillar eats out of the egg: "The taste he has gained of egg-shell seems to allure him: for, strange as it may seem, although placed by the provident parent within immediate reach of choice and succulent food, *he will not taste it until he has devoured the last remnant of his prison-walls*. Strange food this for a new born babe! The act, however, is plainly a provision of nature by which the tender animal is rid of a sure token to his enemies of his immediate proximity." Surely here is an error in fact, and a wrong conclusion whatever the fact may be. I read the above statement on the 25th July last, and at once went to my garden to search for eggs of *Libythea Bachmanni*, on Hackberry leaves. The young caterpillars of this species are green, of a shade so near that of the leaves they feed on, that it is very difficult to discover them. Even where the tip of the leaf has been eaten, and their presence is suspected, it is easy to overlook them. I found at once three eggs and one young caterpillar. The egg from which this caterpillar had come was present at the base of the leaf on the extreme tip of which the little creature rested. A hole was in its side near the top, and no more had been eaten than just enough to permit egress. Repeatedly, in the next succeeding days, I found eggshells of *Bachmanni*, each with an opening like that described, and usually, on the leaf above was the caterpillar. So that here is one species which does not devour the last remnant of its prison-walls—perhaps no part thereof. And instead of ridding itself of a sure token of its presence to its enemies, quite the contrary happens, for the empty shell left at the